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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,214	09/12/2003	Danny L. Hopkins	170.304	7183
28785	7590	05/18/2006	EXAMINER	
JOHN R LEY, LCC 5299 DTC BLVD, SUITE 610 GREENWOOD VILLAGE, CO 80111			DUONG, THANH P	
			ART UNIT	PAPER NUMBER
			1764	

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/661,214

Applicant(s)

HOPKINS, DANNY L.

Examiner

Tom P. Duong

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities:

On page 1, line 6, delete "09/496,971", insert --09/873,635--.

On page 1, line 7, delete "February 2, 2000", insert --June 4, 2001, now U.S. patent 6,797,246 --.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-12 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohle (3,802,158) in view of Diachuk (4,350,504). Regarding claims 1, 3, 7, and 22, Ohle discloses a system for drawn air including gaseous contaminants, comprising: a collector device (26) in a confined environment to receive exhaust flow (28); a cleaner device (12, 14, 20, 22) comprising: a scrubber module (12), a liquid removal module (14), and a filtering device (22) comprises either activated charcoal or potassium permanganate (Col. 4, lines 40-46); a delivery device (84) receives flow from

cleaner device. Ohle discloses odor-removing filter (activated carbon) or a catalyst (potassium permanganate) but is silent with respect a filtering and conversion module comprising both an odor-removing filter and a catalyst. Diachuk '504 teaches a filtering device (108) comprising filter unit 109 comprising oxidizer medium 113 (potassium permanganate) downstream of the charcoal bed 112 (odor-removing filter) to neutralize the odor and the contaminants (Col. 5, lines 15-30). Thus, it would have been obvious in view of Diachuk '540 to one having ordinary skill in the art to modify the device of Ohle with a filtering and conversion module as taught by Diachuk '540 in order to facilitate in neutralizing the odor and contaminants. With respect to circulating the treated gas back to the confined environment, Diachuk '540 discloses the treated gas can be discharged back into the environment surrounding the cooking equipment (Col. 6, lines 20-24). Regarding claim 2, Ohle discloses the confined environment of the claimed invention (Col. 1, lines 10-19 and Col. 2 lines 36-42). Regarding claims 4-5 and 8, Ohle discloses structural features of the claimed invention; therefore, the apparatus of Ohle is capable of converting carbon monoxide to carbon dioxide. Regarding claim 6, the applied references are silent with respect to the use of manganese copper oxide; however, it would have been an obvious design choice to one having ordinary skill in the art to substitute a known manganese copper oxide in lieu potassium permanganate to facilitate in oxidizing and purifying the exhaust gas, since both manganese copper oxide and potassium permanganate are oxidizing medium. Regarding claims 9-11, it is conventional to provide a heater such as a electrical heater embedded in the catalyst layer and it would have been obvious to do so here to activate oxidizing medium to

facilitate the oxidizing process. Regarding claim 12, Ohle fails to disclose a filter comprising one of a HEPA, DOP, or Bag filter. Diachuk teaches it is desirable to provide a high efficiency filter, such as a HEPA filter, to enhance the efficiency of treating the exhaust gas (Col. 5, lines 54-68 – Col. 6, lines 1-8). Regarding claims 19-21, Ohle discloses (best understood by examiner) the liquid removing device (14) including a baffles (64) which has curved sidewall capable intermixing the gas the liquid and remove the mist from the gas flow (Fig. 3).

#### ***Allowable Subject Matter***

Claims 13-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom P. Duong whose telephone number is (571) 272-2794. The examiner can normally be reached on 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Duong  
May 12, 2006

TD

  
Glenn Caldarola  
Supervisory Patent Examiner  
Technology Center 1700